

President's Page

When you receive this issue you will already know that there is an official winner of the \$10 million "Anzari X Prize." After many years of hopes, speculation, skepticism, and competition, "SpaceShipOne" won this coveted prize by becoming the first private reusable launch vehicle (RLV) to successfully fly above 328,000 ft (62 miles or 100 km) twice within two weeks, carrying one civilian astronaut and the equivalent weight of two additional occupants. The "SpaceShipOne" built by Burt Rutan's Scaled Composites, funded by billionaire Paul G. Allen (Microsoft co-founder), and owned by Allen's company Mojave Aerospace Ventures, was flown to a record altitude of 367,442 ft (69.7 miles or 112.3 km) by test pilot Brian Binnie on October 4, 2004. This prize-winning flight occurred exactly 47 years after the launch of the Russian Satellite "Sputnik." In addition, this flight exceeded the altitude (354,200 ft) reached by pilot Joe Walker onboard an X-15 on August 22, 1963. Upon landing, Brian Binnie received his commercial astronaut wings from FAA Administrator Marion Blakey and officially became the 434th human to fly into space. However, we should not forget that the 433rd human to become an official astronaut was Mike Melvill who, on June 21, 2004, had the honor to set the world-record for the first private suborbital flight (328,491 feet) onboard "SpaceShipOne." Melvill flew once again on September 29, 2004, to complete the first of the two official suborbital flights (337,500 ft) required to win the "Anzari X Prize." Melvill and Binnie have become the pioneers of the next phase in the exploration and exploitation of space: "Private Manned Space Flight."

Now that the "Anzari X Prize" has been won, the "X Prize Foundation" plans to host an annual "X Prize Cup" to provide financial incentives to private RLV teams to reach higher altitudes, fly faster, carry more passengers, and to demonstrate faster RLV turnaround times.

Robert Bigelow (founder of Bigelow Aerospace) announced his decision to sponsor a \$50 million prize competition to build and fly a private spacecraft capable of carrying 5 to 7 people into orbit. Such a vehicle would make it possible to transport space passengers to the orbital hotel that he is currently developing based on NASA's inflatable space station technology.

Sir Richard Branson (founder of Virgin Atlantic Airways) announced his plans to establish a space tourism company named "Virgin Galactic." His plan is to license the technology owned by Allen's Mojave Aerospace Ventures, and sign a contract with Rutan's Scaled Composites to build a larger version of SpaceShipOne capable of carrying 5 passengers on a 3-hour suborbital flight (including 3 minutes of micro-gravity). Space passengers will have to pay an esti-



Melchor J. Antuñano, M.D., M.S.

ated ticket price starting at about \$200,000 per person. Branson would like to start "Virgin Galactic" commercial operations in 2007.

According to a Survey on Public Space Travel produced by Futron Corporation, a company that forecasts space-related markets, the space tourism market could generate annual revenues in excess of \$1 billion by 2021. Suborbital space tourism is expected to produce \$700 million in revenues per year by 2021.

In my President's Page published in the October Issue of ASEM I discussed the impending vote by the U.S. Senate on the Commercial Space Launch Amendments Act of 2004 (H.R. 3752) that lays out the definition of a suborbital space passenger vehicle, solidifies the process for licensing such vehicles, and allows paying passengers to fly into space at their own risk. Unfortunately, this proposed legislation has been put on hold due to disagreements over how much protection to offer potential space travelers.

I received the news about SpaceShipOne's successful final flight while attending the 55th International Astronautical Congress of the International Astronautical Federation (IAF), the International Academy of Astronautics (IAA), and the International Institute of Space Law (IISL). This was the right timing for such a development because it gave more relevance to my discussion with the IAA Commission 2 (Space Life Sciences) concerning the medical safety issues of manned commercial space transportation. They expressed interest in establishing a study group to address these issues. I am preparing a proposal that will be submitted to the Space Life Sciences Commission and the Board of Trustees. This will be a good opportunity for a collaborative effort between IAA and AsMA. This was my first time attending this Congress. I was very impressed with the high quality of their 5-day program and the wide variety of topics covered including astrodynamics, Earth observation, life sciences, ma-

terials and structures, microgravity sciences and processes, space communications, space education and outreach, space exploration, space propulsion, space stations, space systems, space transportation, space debris and space traffic, space law and policy, etc. This was a great opportunity for me to learn about other interesting and important issues that are directly or indirectly related to our beloved Aerospace Medicine Specialty. Expanding our knowledge and skills is always a challenging and very satisfying endeavor. We should always take advantage of every opportunity to learn new things!

I would like to share with you some interesting U.S. civil aviation facts that you may or may not know:

- There are more than 620,000 active civil aviation pilots (including about 38,000 women), and about 17,000 air traffic controllers.
- There are approximately 19,581 airports, heliports, and seaplane bases (including 5,286 public use airports and 14,295 private use airports).
- The civil aviation fleet includes about 5,200 air carrier (passenger transport and cargo) and 211,000 general aviation aircraft.
- There are more than 500 million passenger enplanements every year.
- The latest (2003) confirmed "aviation incident" statistics reported 162 near midair collisions, 1,211 air traffic operational errors (0.78 per 100,000 facility activities), 2,698 pilot deviations (1.64 per 100,000 flight hours), 921 surface incidents (1.47 per 1 million airport operations), and 332 runway incursions.
- The latest (2002) confirmed "aviation accident" statistics reported 41 large air carrier, 8 commuter, 59 air taxi, and 1,713 general aviation. The corresponding ac-

cident rates per 100,000 hrs flown were 0.24%, 3.18%, 2.03%, and 6.69%, respectively. In addition, the corresponding fatalities resulting from these accidents were 0, 0, 33, and 576, respectively.

- Between 1990 and 2003 there were about 60,000 aircraft collisions with birds that caused 400 occupant deaths and produced an average of \$400 million in damages per year. The FAA recently completed a series of tests on a portable radar unit that can track flocks of birds around airports. The radar has a 3-mile range and is designed to give fair warning of potential strikes on aircraft departing and arriving at airports. The tests were done at Dallas/Fort Worth International and are now being reviewed. The portable system would be part of the National Bird Strike Advisory System. The system is designed to provide near-real-time warning of the risk of bird strikes by combining radar data and database information on bird strikes.

Going back to AsMA business, I am pleased to inform you that our Executive Committee (ExComm) has completed the development of our Business Plan with specific performance targets that support the Strategic Plan. In addition, after extensive analysis and discussion, the ExComm has approved the partial payoff (1/2) of our AsMA headquarters building mortgage. The other half will be re-financed for a 5-year term and with no penalty for early payoff. This was a timely decision considering the low-interest mortgage rates for commercial property.

In my next President's page I will share with you the outcome of AsMA's involvement in recent aerospace medicine meetings in Slovenia, Italy, and Mexico.

Medical News

Executive Director's Column



Rayman

Backsliding

After three quarters of membership gains, we have taken a loss during the third quarter of this year. We are currently, as of September 30, at a membership of 3,081 after reaching over 3,169 at the end of the second quarter. I cannot emphasize strongly enough how important it is to maintain the largest possible membership for our Association. Our lifeblood is our members. Here is the record:

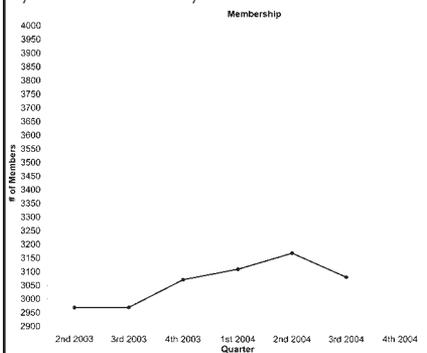
Quarter	Membership
2 nd Quarter 2003	2,963
3 rd Quarter 2003	2,970
4 th Quarter 2003	3,069
1 st Quarter 2004	3,056
2 nd Quarter 2004	3,169
3 rd Quarter 2004	3,081

To have a successful membership program, everyone must contribute and not rely solely on the Membership Committee and the Home Office. We aggressively seek members at every opportunity, particularly at professional meetings, but you, the individual member, can be extremely effective if you would get just one member during 2004. One of our members, Dr. Hadley Reed, recruited approximately 50 members during the preceding year, so I am asking you again to recruit just one new member, whether it is a colleague, friend, or a student/resident. Let's get on the bandwagon and keep the momentum going in the right direction—that is, upward.

I would like to take this opportunity to wish everyone a Happy Holiday Season.

GOAL: 4,000!

IT'S UP TO YOU to get one new member by the end of this year!



First International Congress on Space Flight Issues in the 21st Century, Bellagio, Italy, October 2004

By Pamela Day

The First International Congress on Space Flight Issues in the 21st Century: Cardiovascular Effects and Fluid Shift Issues, came to fruition in Bellagio, Italy, October 18-21, 2004, more than 2 years after the initial request to hold an international meeting had been made. While we could not hold the meeting at the Rockefeller Foundation due to a record number of requests, we decided to pursue other venues in Bellagio.

Sponsored by the AsMA and the Corporate and Sustaining Members Affiliate Group, 16 AsMA members and guests converged in Bellagio. It was truly a matter of "planes, trains, and automobiles," plus buses and boats! But if we couldn't get a group to Bellagio, we'll never get humans to Mars! The participants were: Regina Buccello, M.S.; Victor Convertino, Ph.D.; Pamela Day; Prof. Dr. Jorg Draeger; Alan R. Hargens, Ph.D.; Chrysoula Kourtidou-Papadeli, M.D., Ph.D.; Peter Lee, M.D., Ph.D.; Vishal Nangalia, M.B., Ch.B.; Anne Pavy-LeTraon, M.D., Ph.D.; Thais Russomano, M.D., M.Sc., Ph.D.; M. Joan Saary, M.D.; Marian B. Sides, Ph.D.; Jan Stepanek, M.D., M.P.H.; Lloyd Tripp, M.A.; Joan Vernikos, Ph.D.; and Julielynn Y. C. Wong, B.Sc., M.D.

The Hotel Belvedere proved the perfect location for our meeting. The Pavilion conference room was just right for our 16 participants. The staff was very friendly and helpful.

The idyllic setting was conducive to stimulating the creative process, and the remote location made it easier to concentrate on the task at hand. There was a balance of seasoned investigators and younger students/residents/recent graduates. The mentoring process was evident throughout the meeting. The impressive background among the participants and vast knowledge of previous studies made it immediately apparent that this was a high caliber group.

The objectives of the meeting were:
 1) Contribute to the science of space medicine;
 2) Unify Corporate Members to help focus their energies and create a product to give something back for their support;
 3) Provide mentoring opportunities for young scientists to participate.

The outcome of the meeting was a panel submitted for presentation at the upcoming AsMA meeting in Kansas City, MO; a position paper to be presented to Council; and a possible follow-up publication of the manuscripts and framework created during the meeting. Two separate issues were discussed: cardiovascular risk assessment for long-duration spaceflight (mission to Mars) and space tourism. Their overlap in terms of research and requirements became apparent as the workshop evolved.

Day 1: Marian Sides, who did a fabulous job of organizing the conference, gave opening

See BELLAGIO, p. 1101.



BELLAGIO TEAM--(left to right) Back Row: Julielynn Wong, Joan Vernikos, Jorg Draeger, Peter Lee, Vishal Nangalia, Regina Buccello, Thais Russomano, Jan Stepanek, Joan Saary, Victor Convertino, Alan Hargens. Front Row: Pam Day, Anne Pavy-LeTraon, Lloyd Tripp, Marian Sides, Chrysoula Kourtidou-Papadeli, and Kristos Papadeli.

This Month in Aerospace Medicine History-- October 2004

By Walter Dalitsch III, M.D., M.P.H.

Fifty Years Ago

Twenty-five years of the Journal: "This number... completes twenty-five years of *The Journal*."

"The first number was issued in March, 1930. *The Journal* was then a quarterly and it remained so until 1943 when it was placed on a bi-monthly basis and has remained so ever since.

"So far as we know it was the first medical journal to be devoted to aviation medicine, although several others have appeared on the scene since.

"As we look back on the early issues, they were perhaps rather amateurish and elementary, but aviation medicine itself was then in its swaddling clothes.

"In the early days it was difficult to obtain sufficient articles to fill four numbers a year, and articles on the subject of general physical fitness were included. Now we have more contributions than it is possible to print in six issues. We feel that the scientific standards have increased immeasurably since *The Journal* started" (2).

Falling aircraft pieces (U. S. Naval School of Aviation Medicine, Naval Air Station Pensacola, Florida): "The purpose of this report is to call attention to the danger of injury or death to persons on the ground as the result of falling aircraft and falling fragments or contents of aircraft. Such falling objects may properly be termed aerometeorites and the damage they cause, aerometeorism. There is official record of 235 deaths and 807 injuries in this country. Although these totals are small, nevertheless this new hazard deserves notice partly because of the medico-legal aspects, partly to arouse interest in reporting such accidents, and above all to institute preventive measures before the danger becomes yet greater... Persons most liable to injury are those who work at aviation [sic] facilities, live in close proximity to airports, and those who are spectators at air shows, exhibitions, or the like... This hazard is no longer negligible" (4).

Sealed cabins versus pressurization (USAF School of Aviation Medicine, Randolph Air Force Base, Texas): "It is recommended that pressurization of very high altitude aircraft cabins by superchargers or compressors be de-emphasized in favor of the sealed cabin approach, since pressurization is dependent upon the presence of an atmosphere, thereby limiting the flight of man in a pressurized cabin to that very narrow range of altitude in which a compressible and non-toxic atmosphere can be found. There will always, of course, be a need for low flying, low velocity aircraft. For these the pressurization type of cabin with auxiliary oxygen will be the simplest and most economical to build and operate... Space flight is a fact; space travel is not. Whether or not space travel becomes a fact in our time depends upon the care with which we construct and maintain Man's Milieu in Space" (3).

Pilot error (Medical Division, Civil Aeronautics Administration): "Pilot error continues to be one of the major causes of accidents in air carrier (airline) operations... A

large sample of the errors made by the crews in all air carrier accidents during 1948-1951 was classified according to whether the errors occurred under routine or non-routine (emergency) conditions. The errors which occurred under routine conditions were classified further as to whether they were voluntary, i.e., errors which were knowingly and deliberately made, or non-voluntary. This classification is an attempt to direct attention to the set or attitude of the crew at the time each error occurred... [V]oluntary errors which occurred under routine conditions are most numerous... A large proportion of the voluntary errors (56 per cent) in this sample were associated with fatal accidents as compared with nine per cent of the non-voluntary errors and 23 per cent of the errors which occurred under non-routine conditions... A separate tabulation of all fatal accidents by primary cause showed that pilot error was assigned as primary cause in forty-three of the seventy-seven fatal accidents" (8).

Aerodontalgia (Washington, D. C.):

"Aerodontalgia is discussed as a specific pathology aggravated by high altitudes in flying. The association of this entity with carious teeth has given it added significance. The incidence of the condition and an analysis of the etiological factors indicate that aerodontalgia develops from a composite of dental caries and extrinsic physico-environmental factors. A careful evaluation of these factors will increase the efficiency of all flying personnel and mitigate coincidental casualties. The importance of frequent dental examination including x-rays of the maxillo-mandibular areas and dentition provides an effective means of prophylaxis, control and treatment... The low pressure chambers in simulated altitudes will reveal the existence of underlying residual airspaces beneath faulty inlays whereas x-rays taken at sea level may produce a false negative." (1).

General practitioners and aviation medicine (Forest Hills, Long Island): "The general practitioner now occupies a more important position in his respective community due to the phenomenal advancement of aviation medicine. It appears the public has become more air-minded in the last decade and the frequency of inter-hemispheric and transcontinental trips by air has increased. At present, various questions are arising in the minds of air passengers concerning their safety. The doctor will be called upon by his patients to give them advice about a contemplated trip by air when they are perturbed about heart disease, thyroid dysfunction, high blood pressure, nervousness, et cetera. He will be asked if infants, aged passengers, pregnant women or psycho-neurotics can go on a long flight. Also, he will have to decide whether patients who are suffering from asthma, hay fever, recent postoperative abdominal wounds, or those who have post-traumatic head injuries can travel by air to a distant land without running the risk of aggravating their condition" (5).

Men versus robots: "While it appears practical and advantageous to control airplanes either remotely or automatically in certain limited applications, there is little doubt that we shall have men in most of our high-performance airplanes for many years to come - perceiving flight situations on the spot as they occur and making and executing flight-control decisions as they become necessary.

"We will have men in most of our air-

planes because men are capable of complex pattern discrimination and perceptual constancy, that mysterious ability that enables us, for example, to see round things as round and square things as square even though we view them obliquely. We will have men in our airplanes because they can respond appropriately to so many different kinds of inputs, because they have such an immense long-term storage capacity from which they can quickly select a program appropriate to the immediate situation, because men can change their own transfer functions, because they contain the equivalent of approximately nine billion binary decision elements, because men are relatively immune to jamming, are reasonable reliable, and relatively easy to maintain. Instead of taking the men out of airplanes we must take maximum advantage of these marvelous abilities possessed by all normal people" (7).

Personality screens for aviation (U. S. Naval School of Aviation Medicine, Naval Air Station Pensacola, Florida): "The study of personality characteristics is being given considerable attention at the Naval School of Aviation Medicine, especially as these are related to selection and training within the Naval Air Training Command. It is of vital interest to the Navy to be able to select men who will not only complete the aviation training program but will also be competent Naval officers... A new approach to selection research has been outlined, one that adapts the concepts of n-dimensional geometry to multivariate data. The [Minnesota Multiphasic Personality Inventory] was utilized as a measuring instrument and by means of a discriminant equation based on two clusters, 83 per cent of a sample of 935 NavCads [Naval Cadets] were correctly categorized into pass and fail categories. It is anticipated that future selection batteries may be supplemented by personality measures" (6).

Twenty-five Years Ago

The December 1979 issue of *Aviation, Space and Environmental Medicine* contained a copy of the association's constitution and by-laws, a directory of members, constituent associations and affiliated organizations, lists of members on standing committees, and the year's recipients of awards and nominations to Fellow and Associate Fellow. It also included a list of Wives' Wing Officers and a complete index to volume fifty of the journal.

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remarks and asked the attendees to introduce themselves. Joan Vernikos gave an historical perspective on space travel as part of her welcoming address. Lloyd Tripp presented the Keynote Address, "A Mission to Mars: Challenges and Opportunities," by John Charles (Dr. Charles could not attend). This was the lecture given to the Corporate and Sustaining Affiliate Group as part of their meeting in Anchorage. Dr. Russomano then spoke about "Current Thinking in South America: Cardiovascular Achievements in Space Life Sciences." Dr. Kourtidou-Papadeli presented her perspective on "Space Medicine Research in Greece." After the lunch break, Dr. Convertino arrived and presented "Cardiovascular Effects of Space Travel: Current Research." Dr. Hargens rounded out the day's presentations with "Exercise Studies of Identical Twins Exposed to 30 Days of Simulated Microgravity."

Day 2: The second day opened with Dr. Pavy-Le Traon's presentation of "Artificial Gravity in Simulated Microgravity," followed by Dr. Draeger's "Intracranial Pressure: Fluid Shifts." Then the projector broke. The afternoon presentations were given without benefit of PowerPoint projection, but were still worthwhile, even without the graphics. Mr. Tripp presented "Where We Need to Go: Approaches to Cardiovascular Conditioning." It was a "think outside the box" lecture to motivate the discussions which followed. The rest of the afternoon was devoted to an open forum discussion of the goals of the meeting and how to best present the outcome of the meeting.

The Mayo Clinic sponsored our Tuesday night event: a dinner at Le VeLue in Tremezzo, complete with a ferry ride and taxi service to the restaurant. The meal was fabulous and it was a shame to have to rush off to catch the ferry back to Bellagio.

Day 3: The group met for discussion in the morning. It became apparent that a tabular framework for the assessment of countermeasures would be necessary, so the team broke into groups. The younger scientists took on this task and worked throughout the rest of the morning and into the afternoon. Meanwhile, the rest of the group began the development of the outline for the position paper and abstracts for the panel. When the entire group reconvened, it was obvious that more time would be needed to fully explore the application of the protocol to civilian space tourists. It was decided to concentrate on cardiovascular risk assessment for long-duration missions. Work continued after dinner until late in the evening so that those who had to leave early the next day would be able to contribute to the consensus paper.

Day 4: A brief review of the workshop activities took place over breakfast as participants prepared to depart. As we scattered to meet buses, ferries, hydrofoils, or car returns, goodbyes were exchanged and feelings of camaraderie spread throughout the group. It was a wonderful experience.

We would like to thank all our Corporate and Sustaining Members who contributed so generously to the success of this meeting, and in particular to the Mayo Clinic for sponsoring the Tuesday evening event.

The conclusion of this ground-breaking conference will be presented to council and at the upcoming AsMA meeting in Kansas City.

MEETINGS CALENDAR 2005

January 26-29, 2005, Long Beach, CA.

The 13th Annual Medicine Meets Virtual Reality Conference, organized by Aligned Management Associates, Inc. Info: www.nextmed.com/mmvv_virtual_reality.html; mmvr13@nextmed.com.

February 15-18, 2005, Galveston, TX.

Pushing the Envelope, Medicine in Challenging Environments Conference & 26th Annual Operational Aeromedical Problems Course. For information, go to <http://www.trueresearch.org/mice/index.asp> or contact Devin Rokyta, Seminar Manager, d.rokyta@trueresearch.org; or Natalie Biggers, Seminar Assistant, T.R.U.E. Research Foundation, 8610 N. New Braunfels, Suite 705, San Antonio, TX 78217, 210-829-1239, FAX 210-829-5513, n.biggers@trueresearch.org.

February 24-25, 2005, Washington, DC.

Homeland Defense Training Conference—Medical Planning and Operations in Support of Consequence Management: "Managing the Unthinkable in the Era of Asymmetrical Threats." For information, contact Maurice Martin, Market Access International, 4301 Wilson Blvd. #1003, Arlington, VA 22203; (703) 807-2753; FAX (703) 807-2728; mmartin@marketaccess.org; www.marketaccess.org/event_consngmt.asp.

May 22-26, 2005, Graz, Austria.

15th IAA Humans in Space Symposium. For more information, visit <http://www.uni-graz.at/space2005>.

July 22-27, 2005, Las Vegas, NV.

11th International Conference on Human-Computer Interaction. Further info: HCI International 2005, School of Industrial Engineering, Purdue University, Grissom Hall, 315 N. Grant St., West Lafayette, IN 47907; hci2005.engr.wisc.edu

September 15-18, 2005, Gold Coast, Queensland, Australia.

Conjoint Meeting of the Australasian Society of Aerospace Medicine (ASAM) and the Asia Pacific Federation of Aerospace Medical Associations (APFAMA). The Annual Scientific Meeting of ASAM, together with the 5th Asia Pacific Congress of Aerospace Medicine (APCASM). Contact: Anne Fleming, ASAM Secretariat, +61 3 98991686. fleminga@bigpond.net.au; www.asam.org.au.

AsMA Future Meetings

May 8-12, 2005

Kansas City, MO
Hyatt Regency Crown Center

May 14-18, 2006

Caribe Royale Hotel
Orlando, FL

May 13-17, 2007

Sheraton and Marriott Hotels
New Orleans

May 11-15, 2008

Sheraton and Hilton Hotels
Boston, MA

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NOMINATIONS SOUGHT FOR 2005 AsMA AWARDS

The deadline is December 15 for receiving nominations for AsMA's 15 annual awards to be presented at the 2005 Annual Scientific Meeting in Kansas City, MO. Recognize the accomplishments of your peers! Nominate your co-worker today!

The Awards Committee chair emphasizes, however, that the names of prospective award winners should be submitted as far in advance of the deadline as possible. Lots of time is needed to review all of the names and select the winners.

Nominations can be made by any member of AsMA.

The nominations must be submitted on forms available from the AsMA Home Office, and printed in the journal and on the website at www.asma.org (click on Organization, then Committees, then go to Awards).

E-mail nomination form to: verba.moore@langley.af.mil; and jcarter@asma.org. Or Mail to Home Office, Attn: Awards Committee Chair, 320 S. Henry St., Alexandria, VA 22314.

Policies:

1. The nominee must be a current member of the Association, except that the Sidney D. Leverett, Jr., Environmental Science Award is open to nonmembers. Deceased members may be nominated. Self-nomination is not allowed.

2. The Chair of the Awards Committee does not vote and is not eligible for an award during his/her tenure.

3. Employees of a company sponsoring an award are eligible to receive the award.

4. Awards involving a published paper will be made only to the senior author.

5. Unsuccessful nominees for an annual award will be retained in the active file through three award cycles.

AsMA CORPORATE & SUSTAINING MEMBERS

The financial resources of individual members alone cannot sustain the Association's pursuit of its broad national goals and objectives. Its 75-year history is documented by innumerable medical contributions toward flying health and safety that have become daily expectations by the world's entire flying population—commercial, military, and private aviation. However, support from private and industrial sources is essential. The following organizations, who share the Association's objectives or have benefitted from its past or current activities, have affirmed their support of the Association through Corporate Membership.

- | | |
|-------------------------------------------------------------|--------------------------------------------------------|
| Aeroform Ltd. | Japan Airlines |
| Aeromedic Innovations | Karma |
| Air Canada | Kelsey-Seybold Clinic |
| Air Line Pilots Association | Latecoere International, Inc. |
| AirSep Corporation | Lockheed Martin Corporation |
| American Airlines, Inc. | Mayo Clinic |
| AMS-Austrian Society of
Aerospace Medicine | MedAire, Inc. |
| AstraZeneca Pharmaceuticals LP | Monash University / Alfred Hospital |
| Autoflug Libelle GmbH | Pilot Medical Solutions |
| Aventis Pharmaceuticals | SAIC |
| Aviation Medicine Center at UTMB | Scandinavian Airlines System |
| Baxter Healthcare Corporation | South African Airways |
| Carleton Life Support Systems Inc. | Stereo Optical Company, Inc. |
| David Clark Company, Inc. | United Airlines |
| Environmental Tectonics Corp. | U. S. Aviation Underwriters |
| Essilor of America/Varilux | Universities Space Research
Association (USRA-DSLS) |
| Genex Corporation | Harvey W. Watt & Company |
| GlaxoSmithKline | World Aviation Systems, Inc. |
| International Federation of Air
Line Pilots Associations | Wound Specialty Associates, P.A. |
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MEDICINE IN CHALLENGING ENVIRONMENTS

Pushing the Envelope/Army's OAP Course

February 14 – 18, 2005

Moody Gardens Hotel
Galveston, Texas
(Official conference hotel)

Conference objectives cover the medical knowledge, research and practical skills of a variety of challenging environments including:

CME Accreditation

The US Army Medical Command is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

US Army Medical Command designates this continuing medical education activity for up to 18 hours in Category 1 of the Physician's Recognition Award of the American Medical Association. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Conference information and registration may be viewed at:

www.trueresearch.org/mice

Conference Directors:
Richard T. Jennings, M.D.
Aerospace Medicine Residency
&
John Campbell, LTC, MC
US Army School of Aviation Medicine

- Space
- Aviation
- Motorsports
- Undersea
- Polar
- Mountaineering
- Travel
- Military

Certification in Aerospace Physiology

Board Certification in Aerospace Physiology will be offered in May 2005 in Kansas City, MO, during the 76th Scientific Meeting of the Aerospace Medical Association. For qualified applicants who meet the prerequisites for candidacy and successfully complete the examination, board certification is among the most rewarding professional achievements in a scientist's career.

To simply say that it is important for an aerospace physiologist to obtain professional certification is not a complete statement. Board certification is a prerequisite for several Naval Aerospace Physiologists billets and some USAF assignments, although not currently for many civilian positions. To fully appreciate the value of the designation, one needs to understand why the Aerospace Medical Association established board certification in Aerospace Physiology in the first place.

As with most fields of advanced professional endeavor, the primary reason was to encourage the study, improve the practice, and elevate the standards of excellence in Aerospace Physiology. Preparing for an examination as broad as the board examination in aerospace physiology requires discipline, dedication, and commitment. In the process, it takes many candidates back to their roots as a scientist and reminds them why they committed themselves to pursue an aeromedical specialty to start with. It causes many candidates to review knowledge areas they do not employ on a daily basis, and in some cases to engage in study in areas they may have never pursued before. In such cases, preparing for board certification can actually expand the knowledge base and foundation of understanding of a scientist, and ultimately make the candidate a better aerospace physiologist.

A secondary reason to seek board certification is more obvious; to provide an avenue for professional and peer recognition. As an aerospace physiologist, the associated professional organizations are AsMA, the Aerospace Physiology Society (AsPS), and service-specific collectives such as the Society of U.S. Naval Aerospace Physiologists (SUSNAP). AsMA is the certifying body in aerospace physiology, and successful completion is recognized every year during the AsPS luncheon at the AsMA annual scientific meeting. As of May 2004, 122 specialists successfully achieved board certification since it was first conferred in 1977. Being awarded the gold pO₂ pin and certificate of board certification says that a scientist has met significant academic challenges and is a true professional in a select field. In essence, board certification declares that an individual has formally earned the respect of his or her professional peers and their governing organizations.

Finally, board certification serves as a goal that members can strive to attain through dedicated self-study and personal

and professional contributions to the AsMA and AsPS. However, eligibility is not simply limited to individuals who possess the necessary academic backgrounds. Perhaps the most significant prerequisite is demonstrated interest, participation, and contribution to the field of aerospace physiology over a period of at least 5 years. Relevant education, experience, and professional contributions are each fundamental elements leading to board certification. Board certification in aerospace physiology says that a scientist takes the aeromedical profession seriously.

When a candidate successfully completes the certification exam, the Executive Council of the Aerospace Medical Association, acting upon the recommendation of the Certification Board, grants certification in Aerospace Physiology. The Board consists of nine members plus a chairperson (all of whom are board certified), as well as a representative from the AsMA Executive Council. The Chair of the 2004 Certification Board is Russell S. Lawry, a Commander in the Medical Service Corps of the United States Navy. Activities of the Board are governed by the Board by-laws as approved by the AsMA Council in November 1989 (published in the February 1991 issue of *Aviation, Space, and Environmental Medicine*, Aerospace Physiology Report).

Eligibility to sit for the examination requires a minimum of a baccalaureate degree in physiology, or a closely related life science with significant study in human physiology. The requirement for professional productivity stipulates a minimum of 5 years of professional experience and training in aerospace physiology following awarding of the degree. Other factors considered by the admissions committee include relevant positions held, research, flying experience, academic and military awards, and membership in associated organizations (e.g., AsMA and AsPS). A minimum of two letters of recommendation is also required for each applicant.

Applicants who satisfy all of the eligibility requirements will be subsequently confirmed as candidates by the Admissions Committee to sit for the certification examination. For the 2005 exam, the Chairperson of the Admissions Committee will notify eligible candidates not later than March of their admission to the examination and provide them with information on the examination process. Included in that communiqué will be current references, subject test areas, and sample questions. Based on the comprehensive nature of the examination, preparation by applicants should begin early irrespective of the date of notification.

The Aerospace Physiology Certification Board will administer the certification examination at the 76th Annual Scientific Meeting of the Aerospace Medical Association in Kansas City, MO, on Sunday, 8 May 2005. The examination, which is offered in English only, will contain questions covering various

areas relevant to aerospace physiology including, but not limited to, general human physiology, space physiology, exercise physiology, spatial orientation, acceleration physiology, hyperbaric physiology, decompression sickness, human factors engineering, night vision, LASERS, and operational problems, (e.g., sustained operations, altitude/hypoxia, oxygen requirements, sensory illusions, low pressure operations, parachutes & escape systems, and survival). Also covered will be relevant areas of basic physics and atmospheric science. The weighting of these subject areas is not equal and the distribution of the emphasis is reviewed periodically. All examination questions are of the objective type, i.e., multiple choice, true/false, and answer matching.

Application packages and questions pertaining to the certification process may be directed to the Chairman of the Admissions Committee, David Welge. He may be contacted by email at david.welge@holloman.af.mil. For individuals who do not have access to e-mail, the following mailing address may be used:

Maj. David A. Welge, USAF, BSC.
3801 Basswood Dr.
Alamogordo, NM 88310

Aerospace Physiology Society Membership Benefits

By MAJ Brenda Crook

As the Aerospace Physiology Society (AsPS) Treasurer and Membership chair, I'm often asked about the benefits of membership by my more reticent non-member friends. After some pause, reflection, and the automatic "Because you just should," I only have to look at the membership roster and the answer becomes glaringly clear: "You should become a member because of our members." The names include aerospace physiology A-listers dating from our specialty's infancy to the young physiologists bringing our field into the new age; professionals that have "been there and done that" to the grindstone "young guns" that bring this field of aircrew performance, training, and protection into the daunting world of modern technology. The outstanding networking potential and the chance to download some knowledge from the field's top minds is the first reason to join the Aerospace Physiology Society.

In the world of modern air and space exploitation, technology has far exceeded normal human capabilities in many facets of performance. Indeed, the need for human performance experts has never been greater. The AsPS is a marvelous forum for the integration and utilization of experts in many diverse professional fields. The opportunity to contribute to the protection and performance of the human in air and space environments is evident in the participation of AsPS members in scientific working groups and forums. For example, our members

have shared their expertise in multinational and multi-service working groups for altitude effects, acceleration, spatial disorientation, passenger and patient transport, and human factors. These efforts provide not only an opportunity for AsPS members to contribute expertise but also to learn from the experts. The future of human safety and performance in the environments we exploit is crucially dependent on the participation in these consortiums.

A third benefit to AsPS membership is the opportunity to recognize scientific achievement in the field of aerospace physiology. Three Society awards are presented each year during the annual Aerospace Medicine Association conference. The Wiley Post Award is presented for excellence in Operational Aerospace Physiology. The Paul Bert Award is presented for Aerospace Physiology Research Excellence. Finally, the

Fred A. Hitchcock Award is presented for lifetime Excellence in Aerospace Physiology. In addition, the Society sponsors an award program for the top primary school science teacher in the city that hosts the annual Aerospace Medical Association conference. This encouragement through recognition provides a stimulus to the birth of excellence in the scientific fields.

Finally, AsPS membership gives one the chance to contribute to the success and quality of the annual ASMA conference. Our Society's Education and Training Day has been one of the most widely attended sessions during the annual conference. This scientific panel brings together the finest collection of experts in a particular field to present recent and relevant discoveries, countermeasures, and training philosophies. From these panels come novel solutions to the age-old problem of humans in flight and

space. These multinational and multi-service sessions have included topics such as Spatial Disorientation Countermeasure Training, Nutritional Supplements and Aircrew Nutrition, Night Vision Systems Training Solutions, Acceleration Training, and Aircrew Training in Simulation.

If you're still not convinced of the worth of your \$10 AsPS membership, then I'd like to mention our annual Social where the professional benefits can be overcome by sheer entertainment. Every year during the ASMA conference, the AsPS sponsors a Social to provide an opportunity to interact with fellow members and other interested parties in a more relaxed atmosphere. Here, during drinks, hors d'oeuvres, or dinner, you can connect with other members, make new friends, relive past adventures or create new ones. All in all, your \$10 goes pretty far—truly a bargain in disguise.

Send information for publication on this page to: **Eileen Hadbavny**
1266 Merton Rd,
Charleston SC, 29407-3317
e-mail: hadbavny@usit.net
www.aerospacenursingsociety.org

AEROSPACE NURSING SOCIETY NEWS

Greetings from the Aerospace Nursing President

The year is passing by so quickly. By the time you will be reading this, ANS members on the Scientific Program committee will have met in Alexandria to assist with the peer review of abstracts for the May 2005 meeting in Kansas City. Start making plans to attend.

One of the goals of the ANS is to support education and training for our members. Thus, I am pleased to pass the following information on to you for your consideration.

The Defense Medical Readiness Training Institute (DMRTI) is a tri-service organization focused on joint medical readiness training for all Department of Defense (DoD) medical professionals. As part of its mission DMRTI offers a variety of multidisciplinary, multi-level training opportunities.

DMRTI is most famous for the Combat Casualty Care Course (C4). This course, conducted 12 times a year, prepares relatively junior officers to survive and provide health care at the services Level 1 and 2 facilities.

There are a variety of lectures but the course is focused on tactical combat casualty care and the field experience. This is a great course for nurses assigned to CCAT or AE teams. For nurses the course begins with the Trauma Nurse Core Course (TNCC). This is an excellent opportunity for nurses of all services to improve their emergency nursing skills at a nationally recognized course. DMRTI will fund TNCC instructors (military or civilian) to teach this course in San Antonio.

DMRTI also offers two "conference" style (no field duty) courses. The Joint Operational Medical Managers Course offers an opportunity for field grade officers to learn about joint operational medical planning. The course focuses on joint doctrine, planning principles, and integration of the DoD combat health support system. CEU's are provided.

The newest DMRTI educational opportunity is the Home Land Security Medical

Executive Course. This course is focused on preparing Majors and higher to serve a Joint Task Force Officer or Joint Medical Task Force Commander in support of a domestic CBRNE event or natural disaster. The focus is on the federal, state and local interagency process, legal and medical considerations for mass casualty events, and the coordination of the medial response to minimize morbidity and mortality. CEU's are provided.

DMRTI also conducts a variety of non-resident (they come to you) training programs for National Guard, Reserve, and active duty organizations. These course options include ABLs, TNCC and PHTLS.

More information on these and other DMRTI courses can be found at www.dmrty.army.mil. For more information on these courses please contact COL Alan L. Moloff, MC, USA, Commander, DMRTI, Alan.Moloff@dmrty.army.mil, or call (210) 221-2109, DSN - 471-2109, Fax - extension 2239 (same prefixes).

A Special Note

DMRTI has been our nursing CEU provider for the past two annual meetings, and I wish to applaud DMRTI for working to provide CEUs for those nurses and technicians who attend the Annual Scientific program.

Awards

As a reminder, please get your nominations in for the ANS Awards. Applications are also being accepted for the Louise Marshall Scholarship. This will be the first year for the Marshall Scholarship and deadline for the application is February 15th. More information on the ANS Awards and scholarship can be found on the ANS web site: www.aerospacenursingsociety.org or link from the AsMA web site. Membership is a requirement for awards and scholarship, so please ensure your dues are current. ANS dues of \$10 are payable to the ANS Treasurer Diane Fletcher,

PSC 2, BOX 10849, APO, AE 09012, but you must also be a member of AsMA.

Colleen Morissette
ANS President

Although the courses listed above are for military medical personnel, civilian and medical facilities are focused toward more mass casualty preparedness as well. There are now questions on the licensing exams about mass casualties and alert levels. Health departments and civilian medical hospitals are conducting training exercises in cooperation with local, state, and federal law enforcement agencies as well as medical first responders in the communities. Your page editor recently participated in a drill and seminar in Charleston, SC, on weapons of mass destruction and terrorism. As a retired military flight nurse, much of the information was a review, but to the civilian nurses, it is a different challenge. We can all help build more disaster resilient communities by working together. Meanwhile, have an enjoyable and safe winter holiday season. Start planning now to attend the Annual Meeting in May.

Eileen Hadbavny

Join the Aerospace Nurses Society!

Dedicated to the advancement of aerospace nursing....
Dues are just \$10. Membership is open to allied health professionals for \$5 a year.

For further information, contact:

Diane Fletcher, ANS Treasurer
PSC 2, Box 10849,
APO AE 09012.
Diane.fletcher@ramstein.af.mil.

WING NEWS & NOTES

Send information for publication on this page to:
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Holidays Are a Time To Share

By Harriet Hodgson

Why are holidays special? I think it's because they're a time to share beliefs, traditions, recipes, stories, and gifts. Thanks to my British heritage, our Christmas dinner is straight from a Dickens novel – roast beef and Yorkshire pudding. The puffy, golden-brown pudding, actually a popover recipe, could be a meal in itself.

But family traditions may change with time and today we eat smaller portions. The Yorkshire pudding is made with skim milk and egg substitute. I always fix fresh vegetables, a large salad, and offer fruit for dessert. The vegetarians at our table enjoy Minnesota wild rice with dried cranberries, caramelized onions, and orange zest. These changes have made our holidays even more special.

Storytelling makes our holidays special as well. I come from a storytelling family and one story is about a holiday dinner at our house, when the roast cooked more quickly than anticipated. The refrigerator was full and I was afraid to leave the roast out for fear it would spoil or the dog would eat it. What could I do? I put the roast on top of the car in our freezing-cold garage. Relatives who came in through the garage laughed when they saw the roast and they're still laughing. "Is dinner on top of the car?" they ask.

If you're like me, holidays give you a chance to use family treasures. My parent's gold-rimmed china can't go in the dishwasher, so I don't use it, but I use other things instead, such as the pewter candlesticks which they received as a wedding gift. Getting out family treasures has become a ritual and using them makes me feel good inside.

For many of us, holidays are a time to give gifts. I shop for gifts year-round, and make as many as I can – homemade jam, various kinds of biscotti, and memory books. Wrapping gifts is fun for me and I spend lots of time on it. The last few years we have been giving some of the family treasures to our daughters. Passing on these treasures links the older generation with the younger, including our twin grandchildren.

When you come down to it, most holidays are a celebration of life. No matter where you live or what your heritage is, you have your own holiday traditions. You may give carefully chosen gifts, tell funny stories, use family treasures, and fix family recipes. So it is with a sense of tradition and friendship that I send you my wishes for happy holidays and festive dinners galore.

Sun City, South Africa

By Louise Grenier

Dear friends,

Let it be said: In 2004, we lived two springs in the same year, one in Alaska and one in South Africa!

After more than fifteen hours in the air, we landed in Johannesburg. Then a two-hour



Bridge of Time: Jean Pettyjohn, Judith Donaldson, Helen Lestage and Famke Peters enjoy the view at the Bridge of Time in Sun City, South Africa.

drive took us to Sun City. During the drive, we saw a little of Pretoria (the capital), flat areas of grasslands and scattered trees, small settlements and several platinum mining installations. After 31 hours, from our apartment in Montreal to the hotel, we finally arrived in Sun City. Friends were there to welcome us and remind us that we were expected for dinner at the Palace. Who could refuse such an invitation? A quick shower and we were ready to go. It turned out to be a delightful aperitif for the upcoming week.

To start with, a few words about this resort known as Africa's Kingdom of Pleasure. Sun City resort is a huge complex of entertainment center, casinos, golf courses, tennis courts, restaurants, and four world class hotels: the magnificent Palace of the Lost City with its architectural wonders, minarets, sculptures of life size elephants, and a man-made beach with waves; the Cascades with tumbling waters flowing through a lush tropical forest, a spectacular panorama over the gardens to the Gary Player golf course and the bushveld hills beyond; the Sun City with boutiques, casinos and entertainment theatre; and finally the Cabanas with a view on a lake where water-skiing and sunset cruises take place. Nearby lies the Pilanesberg National Park, the fourth largest game reserve in Africa. The resort offers 24 hours of fun and entertainment.

Despite the time change, we quickly adapted and started to visit this kingdom. Under the guidance of Famke Peters from Cape Town, Helen Lestage, Jean Pettyjohn, Judith Donaldson, Star Fennell, and I started with the Palace and its surroundings. The Palace of the Lost City dominates a vista of jungle and the amazing Valley of Waves. The Palace is truly spectacular.

Then the four of us went to see the Extravaganza show *Odyssey*, 80 minutes of cabaret dancing, singing, magic, and acrobatics, with very colourful costumes.

One early and cold morning, some of us boarded an open jeep and went on a Safari. A guide drove us through the game reserve, answered our questions, and stopped for pictures. Somehow, we were not prepared for cold weather. The resort is at almost 5000 feet

above sea level; the mornings and evenings are cold and to top it off, a cold front was passing by. However, the blankets supplied kept us relatively warm. In the park, we observed several zebras, impalas, elephants, wildebeest, warthogs, giraffes, white rhinos, and hippos. No lions, though. To watch the animals in their natural habitat is really an exciting experience. We got back to our hotel just in time for a warm breakfast. The same evening, we were all bused to the park for a BBQ under the stars. Despite the cold and the wind, we enjoyed the feast and the company. The food was plentiful and delicious. It was unfortunate that the weather did not cooperate; it would have been a very enjoyable evening; the set-up was perfect.

We went to the Sundown Ranch Lion Park where we held in our arms a one-month-old baby lion and bottle fed a four-month-old. This was exceptional. I never thought this was feasible, to hold a lion cub in my arms, much like a big cat with very sharp claws. During the day, the big lions are rather quiet, lying around and enjoying the sun. On our way back to the hotel, we made a quick stop at the crocodile farm.

It was very relaxing and enjoyable to walk in the tropical forest next to our hotel, stop at the aviary, sit at the ninth hole of the Gary Player and watch the BMW golfers finish the first half of their round. We also tried our golfing talents at the Lost City golf course. Well, the course was perfect, but not this golfer. Nevertheless, the afternoon was superb, spent with very nice friends admiring fantastic panoramas. On two different occasions, a couple of black and white birds, much like our red-winged blackbirds, did not want to be disturbed and chased me away from their territory. Talking about birds, this is really the country for bird watchers. Birds are numerous and some are very colourful. Sir John Baird seemed to enjoy every minute of his morning walk around the golf course.

All in all, the accommodations were excellent, the cuisine delicious, and the service always very polite and sparkled with little surprises: chocolate and rose petals on our pillow or a glass of sherry before dinner. The formal dinners were well organized and very elegant. Thank you to the South Africans for a very special week.

The only sad note for this fabulous week was to learn that our good friend, Dr. George Takahashi, had passed away. We all had warm thoughts and a couple of toasts for George and also for our dear friend Elina. He will be greatly missed.

See you in Kansas next May.

Join the Wing!

The Wing of the Aerospace Medical Association was formed in 1952. Dues are \$20 per year. For further information, contact: Judy Waring, 4127 Kenyon St., Seattle, WA 98136; (206) 933-0884; e-mail: judywaring@comcast.net

Send information for publication on this page to: **Corporate News**
Aerospace Medical Association
320 S. Henry Street
Alexandria, VA 22314-3579

NEWS OF CORPORATE MEMBERS

MedAire Unveils Security Solutions for Business Aviation

MedAire, Inc. recently announced that it has expanded beyond the medical assistance services the company provides the aviation industry, launching a new line of security solutions to help flight crews prepare for and resolve potential security risks.

MedAire's new security program, which was revealed during the 2004 National Business Aviation Association (NBAA) convention and meeting, provides flight crew with both preparedness strategies and emergency response assistance. The program includes services such as crisis management and incident response plans; onsite security audits and travel risk assessments; 24-hour security consultation; web-based security alerts; and emergency evacuation assistance.

MedAire's security programs include: 24-hour security consultation and assistance; Crisis management and incident response plans; Onsite security audits; Client-specific risk assessments; and Online travel and security alerts.

About MedAire, Inc.

Established in 1986, MedAire offers fully integrated health and security solutions including remote emergency assistance services, evacuations, training and web-based education programs, specialized resources such as medical and security kits, and a network of western-standard medical clinics in Asia. MedAire provides services to international business travelers and expatriates, commercial airlines throughout the world, corporate flight departments, government agencies, military and maritime operators.

ETC's First Tactical Flight Simulator Shipped

Environmental Tectonic Corporation recently announced shipment of the first G-Force Environment Trainer Model II (G-FET II) equipped as an Authentic Tactical Flight Simulator (Model ATFS-400). Shipment of the G-FET II / ATFS-400 followed successful completion of a comprehensive Acceptance Testing process, involving customer experts, that was conducted at ETC's manufacturing plant in Southampton, PA. ETC is the only centrifuge manufacturer in the world that has the ability to design, build, and test in-house. Field engineers installed the G-FET II at the customer's site. After installation, Acceptance Testing was repeated to insure complete customer satisfaction as well as system safety and reliability.

Over the past 12 years, ETC has developed and manufactured the G-FET II, a project that has produced the world's most advanced high performance human centrifuge. Over the past 5 years, ETC has integrated full Tactical Flight Simulation into the G-FET II to produce the G-FET II / ATFS-400. The G-FET II / ATFS-400 combines the latest available flight simulation technology to optimize

flight fidelity. This technology includes high fidelity aircraft specific cockpits, offensive and defensive mission systems, realistic wide field of view visual displays, and virtual battle space. Additionally, the G-FET II / ATFS-400 provides the proprietary ETC technology of G-pointing that provides the pilot with the same sustained G that he experiences during actual combat maneuvering.

ETC's breakthrough technology allows a pilot to hone critical air combat skills in a safe and economical environment at 1/20th the cost of flying in the aircraft. Savings include reduced fuel consumption and reduced aircraft wear. Even greater savings are realized through lowered accident rates since the pilot can rehearse an aircraft mission in the G-FET II / ATFS-400 before actual flight. Over 150 experienced fighter pilots have "flown" the G-FET II / ATFS-400 to date and the consensus is that it is the most authentic simulator currently available.

Jim Campbell, Editor, Aero-News Net Magazine, recently took ETC's challenge to fly the Authentic Tactical Flight Simulator Model ATFS 400X configured as an F/A-18 "Hornet." His flying experience, combined with the incredible life and cost saving benefits, significantly impressed Mr. Campbell enough to write a four-part series profiling the unique ATFS Model 400. Inertial or "G forces" are a major distraction and a stress-amplifying factor aircrew must adapt to while engaged in tactical maneuvering combat. Mr. Campbell's article candidly describes his experience of realistic G-forces that occurred during his flight.

About ETC

ETC designs, develops, installs and maintains aircrew training systems, public entertainment systems, process simulation systems (sterilization and environmental), clinical hyperbaric systems, environmental testing and simulation systems, and related products for domestic and international customers.

Phase III Trials for CEROVIVE (NXY-059) to Continue

AstraZeneca announced recently that the Phase III trials (SAINT I and II) to determine the effect of CEROVIVE (NXY-059) on disability and neurological recovery in acute ischemic stroke patients will continue as planned. This decision is based upon a recommendation from the Independent Data and Safety Monitoring Board (IDMB) and the trial Steering Committee. The decision follows a recent IDMB interim analysis of these trials, which included data on stroke outcomes after a three-month follow-up period in 1,000 patients. The purpose of this analysis was to assess whether it would be futile (not meaningful) to continue patient enrollment in the SAINT trials when looking at the degree of post-stroke disability experienced by patients who received drug as compared to patients who received placebo, and to determine if there were safety concerns.

The SAINT trials for CEROVIVE (NXY-

059) are being conducted worldwide in approximately 40 centres across approximately 40 countries (Europe, Asia, Australia, New Zealand, South Africa, United States, Canada and Latin America) to evaluate the effect of the compound in acute ischemic stroke patients. The safety of patients included in the trials is being continually evaluated.

Additionally, the CHANT (Cerebral Hemorrhagic And NXY-059 Treatment) trial initiated enrolment in August 2004. CHANT is a double-blind, randomized, placebo-controlled, parallel-group, multi-center, Phase IIb study to assess the safety and tolerability of 72 hours intravenous infusion of CEROVIVE (NXY-059) in adult patients with acute intracerebral hemorrhage. The trial will involve 150 centers in 21 countries.

CEROVIVE (NXY-059), a neuroprotectant with free-radical trapping properties, is a drug under development by AstraZeneca and licensed from Renovis, Inc.

About AstraZeneca

AstraZeneca is a major international healthcare business engaged in the research, development, manufacture and marketing of prescription pharmaceuticals and the supply of healthcare services. It is one of the world's leading pharmaceutical companies with healthcare sales of over \$18.8 billion and leading positions in sales of gastrointestinal, oncology, cardiovascular, neuroscience and respiratory products.

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NEWS OF MEMBERS

Send information for publication on this page to: **News of Members**
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CDR William D. Agerton, Jr., MC, USN, of Ridgecrest, CA, originally a flight surgeon/pilot for Fighter Squadron 211, USS Enterprise, now holds the position of Operational Test Director, Aeromedical Division, Air Test and Evaluation Squadron Nine (VX-9), at China Lake Naval Air Weapons Center, CA. He is the incoming Chairman of the U.S. Navy Aeromedical Dual Designator Advisory Group.

Col. James H. Heriot, USAF, MC, SFS, of O'Fallon, IL, formerly the Chief of the Medical Flight Screening Branch, Clinical Sciences Division at the USAF School of Aerospace Medicine, Brooks City-Base, TX, has been transferred to the position of Chief of the Medical Staff (SGH) at the 375th Medical Group (AMC), at Scott AFB, IL.

MAJ Gregory T. Lang, MC, USA, originally a Captain, has been promoted and is now Chief, Injury Biomechanics Branch at the U.S. Army Aeromedical Research Laboratory at Fort Rucker, AL.

Lt.Col. Jon F. Petersen, USAF, MC, FS, of Springboro, OH, previously a Fellow in Aerospace Medicine at Johns Hopkins University, has been transferred to the position of Chief of Occupational Medicine at Wright Patterson AFB, OH.

Terrence Riley, M.D., of Kansas City, MO, recently joined the Mid America Brain and Stroke Institute, where he is primarily work-



William E. Collins, Ph.D., was inducted into the Oklahoma Aviation and Space Hall of Fame during ceremonies conducted at the Omniplex in Oklahoma City on September 24, 2004. Dr. Collins was cited for his scientific and administrative achievements in aviation medicine and aviation safety during a 1961-2001 career at the FAA Civil Aerospace Medical Institute (CAMI). Sharing the occasion with Dr. Collins (near left, with plaque) were (left) Melchor J. Antuñano, M.D., current Director of CAMI and President of AsMA; (near right) David J. Schroeder, Ph.D., manager of CAMI's Aerospace Human Factors Research Division and past-President of AsMA; and (far right) J. Robert Dille, M.D., a previous CAMI Director and former AsMA President. Dr. Antuñano participated in the ceremonies as a selected presenter.

ing in the Comprehensive Epilepsy Program and Epilepsy Monitoring Unit. Before that, he was a professor at Baylor College of Medicine in Houston, TX, and Chief of Neurology at Ben Taub Hospital.

Lt.Gen.Prof. Gaetano Rotondo, M.D., Ph.D., FRAes, of Piomborno, Italy, held the "Lettura Magistrale" in memory of Prof. Rodolfo Margaria during the Opening Ceremony of the XIX National Congress of the Italian Society of Aviation and Space Medicine held in Milano in May. As the Lecturer, Honorary President of the Society, and a former friend and student of Prof. Margaria, Dr. Rotondo remembered the many important scientific activities performed by that gentleman, who foresaw and described, some years in advance, the exact mechanism of the future of human locomotion on the Moon's surface "by successive leaps."

Col. Thomas M. Slyter, USAF, MC, originally the Chief of Aerospace Medicine at Kunsan AB, Korea, was promoted to Colonel and transferred to the position of Commander of the 43rd Aeromedical Dental Squadron at Pope AFB, NC. He recently became an Associate Fellow of the Aerospace Medical Association.

Col. (Dr.) David Snell, USAFR, MC, CFS, has been assigned as IMA to Gen. Tom Travis, Commander, 311th Human Systems Wing, Brooks City Base, Tx. He was formerly Chief of Aerospace Services at the 452nd AMDS, March ARB, CA. Dr. Snell has recently finished a civilian assignment as Chief Medical Services Officer for Bechtel Corp at the Aberdeen Proving Ground Weapons Demilitarization Facility. He is currently serving as Medical Director for Bechtel Nevada and supervising medical operations at the DOE Nevada Test Site.

Focus on Members:

S. Harry Robertson inducted into Army Hall of Fame

Dr. S. Harry Robertson, CEO of both Robertson Research Group, Inc. and Robertson Aviation, was inducted into the Army Aviation Hall of Fame for his outstanding contributions to Army aviation over an extended period of time, including pioneering crash-resistant fuel systems. He was also recently accepted as a candidate for induction into the National Aviation Hall of Fame.

A native of Phoenix, AZ, Dr. Robertson was born in October of 1934. He earned his B.S. degree from and did postgraduate work at Arizona State University. He trained as an Airforce pilot and in crash fire research. He served in the Reserve Guard and then the U.S. Air Force for many years.

Dr. Robertson is a member of NFPA, FSF, the Soaring Society of America, and has been a member of the Aerospace Medical Association since 1964.

New Members

Arsintescu, Lucia, M.A., Moffett Field, CA
Dean, Jay B., Ph.D., Dayton, OH
Escandon, Adriana A., M.D., St. Louis, MO
Gordon, Scott M., R.N., Huntington Beach, CA
Mickelson, Morris L., M.D., W. Bloomfield, MI
Skiver, Patrick P., M.Sgt., USAF, APO, AP
Tilgner, Arthur D., M.D., Ninilchik, AK

International New Members

Al-Yahyai, Nasser Saif, M.D., Osterley
Compus, UK
Bartkaitiene, Jolanta, Vilnius, Lithuania
Heer, Martin A., Rasta, Norway
Qureshi, Sultana A., B.M.Sc., Alberta, Canada
Ryan, Elizabeth A., Sqn.Ldr., RAAF,
Toowoomba, Australia
Yeo, Hui Kian Chris, DAvMed., Lantau
Island, Hong Kong

In Memoriam Jeffrey Glenn Davis

Jeffrey Glenn Davis, M.D., Col., USAF (Ret.), of Oak Ridge, TN, died in October at his home. Born in Jackson, TN, in 1940, Dr. Davis earned his B.S. in biology at Union University in Jackson, TN, in 1962 and his M.D. at the University of Tennessee College of Medicine in Memphis, TN, in 1971. He attended the Aerospace Medicine Primary Course at Brooks AFB, TX, in 1972, where he later served as commander of the USAF School of Aerospace Medicine (USAFSAM). He then attended Tulane University in New Orleans, LA, where he earned his M.P.H. degree in 1975.

Dr. Davis entered the U.S. Air Force in 1962 and served for 28 years. He was commissioned upon completion of officer training school, and after technical training school at Keesler AFB, MS, he was assigned as a computer maintenance officer at Offut AFB, NE, where he was responsible for the operation and maintenance of the display systems in the SAC Command Post. In 1967, he was selected for the first class of the AFIT Medical Education Plan for Reserve Officers. He attended the University of Tennessee, and interned at Malcolm Grow USAF Medical Center, Andrews AFB, MD. Following completion of the USAF's primary aerospace medicine course, he was assigned to the USAF hospital in Weisbaden, W. Germany, as Chief of Military Public Health and later Chief of Flight Medicine.

After earning his M.P.H., Dr. Davis spent a year at USAFSAM, then a year of residency

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at the USAF hospital, Davis-Monathan AFB, AZ, where he was the first A-10 weapons systems flight surgeon. When he completed his residency, Dr. Davis remained at Davis-Monathan AFB as Chief of Aerospace Medicine and as medical coordinator of Operation Bentwaters—the operational deployment of the first A-10 wing to Europe—until 1979. He then attended the National War College after two years as hospital commander at Holloman AFB, NM, graduating in 1982.

He was named Vice Commander of the Aerospace Medical Research Laboratory at Wright-Patterson AFB, OH, before moving to USAFSAM in 1983 as Vice Commander, later becoming Commander in 1985. He then served as deputy command surgeon and director of Environmental Health Operations for Air Force Logistics Command at Wright-Patterson. In 1990, after retiring from the USAF with the rank of Colonel, Dr. Davis was named the new vice president and chairman of the Medical Sciences Division at Oak Ridge Associated Universities.

Dr. Davis was a member of the Aerospace Medical Association for 32 years, served as a member of the Executive Council, and became a Fellow in 1984. He was also a Diplomate of the American Board of Family Practice; a Fellow of both the College of Preventive Medicine and the American Academy of Family Physicians; and a Past President of the Society of U.S. Air Force Flight Surgeons. His awards and honors included being named Tactical Air Command Flight Surgeon of the Year by the Society of U.S. Air Force Flight Surgeons, being named the Air Force Association (AFA) Medical Services Officer of the Year by the Tucson Chapter of the AFA, and receiving the USAF Meritorious Service medal with two oak leaf clusters, the Air Medal, the National Defense Medal, and the Humanitarian Service Medal.

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Flight Surgeon:

- Work in Star City, Russia and Johnson Space Center – Houston
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- Provide primary acute care in Russia to astronauts & dependents, NASA personnel
- Support training & procedures development in U.S.
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All candidates must have a degree in medicine (D.O. or M.D.) with ABMS-recognized board certification or eligibility in a clinical specialty. Current unrestricted Texas medical license, DEA and Texas DPS controlled substances certifications. Must be a U.S. citizen or permanent resident. See our website at www.utmb.edu Send a detailed resume to: Angela Whorton PMCH The University of Texas Medical Branch 301 University Blvd. Galveston, TX 77555-1150 email: anwhorto@utmb.edu UTMB is an equal opportunity/ affirmative action employer, M/F/D/V. UTMB is a smoke/drug free workplace and hires only individuals authorized to work in the U.S.